

MANIPULATING THE SIZE OF WAVEGUIDES WRITTEN INTO SUBSTRATES USING FEMTOSECOND LASER PULSES

Abstract

Waveguides produced in bulk glass using femtosecond pulsed
5 lasers have diameters and refractive index profiles that are
manipulated by additional motions or beams. For example, spot
focuses of the femtosecond pulsed lasers trace overlapping or widened
tracks by superimposing additional relative motions between the spot
focuses and the bulk glass. Additional femtosecond pulsed beams can
10 also be used to produced widened waveguides.